

CLAIMS:

1. A test access architecture for testing modules (3) in an electronic circuit, the test access architecture comprising:
 - the test access mechanism arranged to transport test stimulus data to, and test response data from a module (3) being tested;
 - 5 - a global enable signal (27), the global enable signal (27) provided for placing the modules (3) in a test mode; and
 - a control circuit (59) provided between the global enable signal (27) and an associated module (3), wherein the control circuit (59) is arranged to control whether or not the global enable signal (27) is passed to its associated module (3).
- 10 2. A test access architecture as claimed in claim 1, wherein the control circuit (59) is controlled by a dedicated bypass signal (61) for that module.
3. A test access architecture as claimed in claim 2, wherein the control circuit
15 (59) is connected to receive the global enable signal (27) and the dedicated bypass signal (61), and arranged to provide a local enable signal (60) to its associated module (3) based on the respective states of the global enable signal (27) and the dedicated bypass signal (61).
4. A test access architecture as claimed in claim 3, wherein the control circuit
20 (59) is arranged to pass the global enable signal (27) if its associated module (3) is being tested, and to block the global enable signal (27) if its associated module (3) is not being tested.
5. A test access architecture as claimed in any one of the preceding claims,
25 wherein the control circuit (59) is an OR gate.
6. A test access architecture as claimed in any one of claims 1 to 4, wherein the control circuit (59) is an AND gate.

7. A test access architecture as claimed in claim 1, wherein the electronic circuit is an integrated circuit.
8. A test access architecture as claimed in claim 7, wherein the control circuit (59) is located within a test wrapper of its associated module.
9. A test access architecture as claimed in claim 7, wherein the control circuit (59) is located in a test control block of a system on chip (SOC).
10. A test access architecture as claimed in claim 1, further comprising means for loading test stimulus data and unloading test response data in a pipelined manner.
11. A test access architecture as claimed in claim 1, wherein the global enable signal (27) is global to the test access mechanism (TAM) to which the plurality of modules (3) are connected.
12. A test access architecture as claimed in claim 1, wherein the global enable signal (27) is global to more than one test access mechanism (TAM) on the electronic circuit.
13. A method of testing a module (3) in an electronic circuit, the module (3) being one of a plurality of modules connected in series to a test access mechanism (TAM), the test access mechanism arranged to transport test stimulus data to a module (3) being tested, and to transport test response data from the module (3) being tested, the method comprising the steps of:
- loading a first set of test stimulus data into the module (3) being tested;
 - testing the module in response to a global enable signal (27) being activated;
 - unloading test response data captured from the module (3) being tested;
- wherein, during the testing step, other modules (3) connected to the test access mechanism (TAM) are placed in a transport mode of operation, such that the other modules (3) do not corrupt a second set of test stimulus data being loaded into, or previous test response data being unloaded from, the module (3) under test.
14. A method as claimed in claim 13, further comprising the step of providing a control circuit (59) between the global enable signal (27) and an associated module (3),

wherein the control circuit (59) is arranged to control whether or not the global enable signal (27) is passed to its associated module (3).

15. A method as claimed in claim 14, wherein the control circuit (59) is controlled
5 by a dedicated bypass signal (61).

16. A method as claimed in claim 15, wherein the control circuit (59) is connected
to receive the global enable signal (27) and the dedicated bypass signal (61), and arranged to
provide a local enable signal (60) to its associated module (3) based on the respective states
10 of the global enable signal (27) and the dedicated bypass signal (61).

17. A method as claimed in claim 16, wherein the control circuit (59) is arranged
to pass the global enable signal (27) if its associated module (3) is being tested, and to block
the global enable signal (27) if its associated module (3) is to be placed in the transport mode.
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18. A method as claimed in claim 13, comprising the step of providing an OR
logic function as the control circuit (59).

19. A method as claimed in claim 13, comprising the step of providing an AND
20 logic function as the control circuit (59).

20. A method as claimed in claim 13, further comprising the step of providing the
control circuit (59) within a test wrapper of its associated module (3).

25 21. A method as claimed in claim 13, further comprising the step of providing the
control circuit (59) in a test control block of a system on chip (SOC).

22. A method as claimed in claim 15, further comprising the step of providing the
control circuit (59) within its associated module (3).

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23. A method as claimed in claim 13, wherein the test pattern data is processed in
a pipelined manner, such that modules located prior to the module (3) being tested contain
the next set of test stimulus data from a series of test stimulus data, and modules located after
the module (3) to be tested contain test response data from previous tests.

24. A method as claimed in claim 13, wherein the global enable signal (27) is arranged to be global to the test access mechanism (TAM) to which the plurality of modules (3) are connected.

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25. A method as claimed in claim 13, wherein the global enable signal (27) is arranged to be global to more than one test access mechanism (TAM) on the electronic circuit.